Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	)	
	)	
A National Broadband Plan for Our Future	)	GN Docket No. 09-51

COMMENTS
OF
SPRINT NEXTEL CORPORATION

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Sprint Nextel Corporation (Sprint) hereby submits its comments on the Notice of Inquiry (NOI) released April 8, 2009, (FCC 09-31) in the above-captioned proceeding.

I. INTRODUCTION AND SUMMARY

The United States economy is increasingly dependent upon broadband services. The growth of that economy will in turn depend upon the implementation of policies that encourage the development of a robust and competitive broadband market. Broadband services offer the promise of improved health care and education; more productive and flexible workplaces; enhanced public safety and homeland security; and the ability to share information, perform financial transactions, shop, and communicate with others at speeds and at a level of security that were undreamed of only a few years ago. Access to broadband service over multiple technologies - each of which offers particular benefits such as mobility, speed, and scope - is currently available to hundreds of millions of people across the nation, with wireless, wireline and satellite providers collectively spending billions of dollars each year to expand and improve their networks.

The basis of this critically important deployment, and the key to ensuring and expanding widespread, affordable broadband access, is competition. Sustainable, facilities-based broadband competition will ensure that all Americans have access to broadband choices both

now and in the future. However, facilities-based broadband competition is threatened by the market failure of a critical input to broadband services: the dedicated special access and middle mile facilities that connect a cell site to a wireless carrier's backbone network or a broadband carrier to its Internet Service Provider's network. The excessive rates being charged for these facilities, and the anti-competitive terms and conditions governing provision of these facilities, have forced carriers such as Sprint to funnel billions of dollars that could have been invested in their own broadband networks and services into the overflowing coffers of the incumbent local exchange carriers (LECs) – in particular, AT&T and Verizon – that dominate the special access markets so completely.

There is by now overwhelming evidence on the record demonstrating that AT&T, Verizon, and other incumbent LECs exercise monopoly control over special access/middle-mile backhaul in their respective service territories. The overall lack of competitive alternatives to these facilities has allowed AT&T and Verizon to earn excessive, supra-competitive rates of return; to charge rates that are multiples of those charged for comparable services (their UNE offerings, which are based on forward-looking costs, as well as their high-speed retail Internet access offerings, which are constrained by competition from cable providers); and to impose onerous and unreasonable terms and conditions of service which effectively lock in existing subscribers even in those limited areas where competitive alternatives may be available.

As a result of the failure in the special access/middle mile market, society has suffered a deadweight loss. Consumers have less – and less affordable – access to broadband than they would if the Commission had implemented long-awaited special access reform measures. And the American economy as a whole has suffered billions and billions of dollars in lost

productivity, lost income, and lost jobs. Accordingly, Sprint urges the Commission to take quick action to correct this critical element of broadband service deployment.

Correction of the special access market will go far toward expanding the deployment of broadband services, and the Commission should evaluate the effectiveness of such reforms, combined with other federal broadband initiatives, in promoting access to broadband services to all Americans. Although there may still be certain unserved or underserved areas that need additional support, Sprint encourages the Commission to resist the temptation to "cure" insufficient broadband access in such areas through an expansion of current universal service subsidies. The existing universal service mechanism is broken. It has introduced massive distortions in the provision of both wireline and wireless services and is in drastic need of major overhaul. Any additional broadband support that may be needed should be addressed through a newly defined mechanism that ensures the development of a sustainable and competitive market, not a simple transfer of wealth from one sector of the communications industry to another based on historical revenue sources.

II. BROADBAND DEFINITIONS AND PRODUCT MARKETS

In the NOI, the Commission has sought comment on "whether to adopt different definitions or standards of what constitutes broadband based on the technology being used to provide the service or the context in which the service is applied, or some combination of both" (¶19); how to measure speeds on a broadband network, including whether to measure speeds at the edge of the service contour and the loading conditions that should apply (¶20); how the Commission should view the substitutability relationship between fixed wireline services and fixed or mobile wireless services (¶26); and how to determine the relevant product and geographic markets for broadband (¶35). As discussed below, broadband should not be defined solely in terms of upload and download speeds; the various broadband technologies each offers

particular benefits that should be taken into consideration in determining whether a market has adequate access to broadband services, or whether federal stimulus grants or other federal support should be made available. In addition, in assessing broadband needs and the measures to overcome challenges to broadband deployment, the Commission's analysis must extend to the high-capacity transport facilities underlying the provision of broadband services.

Exactly what constitutes a broadband service is an evolving concept. The FCC has defined broadband as "services and facilities with an upstream and downstream transmission speed of more than 200 kbps,"[1] but has added several speed tiers (with separate upload, download, and technology rate codes) that recognize that broadband can reflect a wide range of consumer experiences and needs.[2] For purposes of the instant NOI, the Commission should continue to adopt a flexible approach to defining broadband which both recognizes fiscal realities[3] and accommodates the "inherent capabilities and limitations"[4] of the different types of technologies.

As Chairman Copps recognized in the *Rural Broadband Report*, there are many broadband technologies, each of which "has specific cost and performance attributes that, coupled with compatibility and appropriateness of existing infrastructures and demand

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1 *Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, Report, 14 FCC Rcd 2398, 2406, ¶ 20 (1999).

2 The tiers are: First Generation data: 200 kbps up to 768 kbps; Basic Broadband, 768 kbps to 1.5 Mbps; 1.5 Mbps to 3.0 Mbps; 3.0 Mbps to 6.0 Mbps; 6.0 Mbps to 10.0 Mbps, 10.0 Mbps to 25.0 Mbps, 25.0 Mbps to 100.0 Mbps, and above 100.0 Mbps. *See Development of Nationwide Broadband Data to Evaluate Reasonable and Timely Deployment of Advanced Services to All Americans,* 23 FCC Rcd 9691, 9700-9701, ¶ 20, n.66 (2008).

3 Linking on-going broadband support to aggressive speed targets may well prove to be fiscally unsupportable.

4 *Bringing Broadband to Rural America, Report on a Rural Broadband Strategy*, released May 22, 2009 by Acting Chairman Michael Copps ("*Rural Broadband Report*"), at 34.

expectations, have an impact on its suitability for deployment in a particular rural area."[5] The same holds true in non-rural areas as well. Therefore, the Commission should evaluate mobile and fixed broadband services using very different criteria. Mobile broadband speeds in general are lower than those achievable using fixed broadband, and are subject to certain environmental and physical factors that are less relevant to fixed broadband services.[6] However, wireless services offer the key benefit of mobility (which fixed services obviously do not), and in some cases, may be less costly to deploy than wireline broadband, since wireless broadband can be provided to many users in a given area through a single tower, whereas fixed broadband would require last-mile build-out to each end user's fixed location. Adopting broadband public policies that reflect the different benefits offered by different broadband technologies is fully consistent with the Commission's long-held principles of technological and competitive neutrality.

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5 *Rural Broadband Report* at 33-34.

6 Measuring the broadband speed that any given consumer may experience at any given time and location poses a challenge. Mobile broadband speeds vary due to weather, foliage, physical location, variable system loading, distance from the mobile base station, and other factors. Average mobile broadband speeds vary for the same reasons, as well as the duration and time of day of the averaging period. At the same time, however, measuring speeds based on "theoretical maximum speeds" is completely divorced from actual consumer experience and at odds with how mobile broadband service providers actually plan, build and operate their network systems. For example, a mobile technology may be theoretically capable of providing 5 Mbps to a user; however, the user will not actually receive that data rate if the service provider does not have adequate backhaul capacity at the transmitting site to support providing that speed to all the users that request it. While actual end-user speeds can be affected by system loading, physical location and other factors, carriers routinely take these factors into account in planning their systems. Thus, modeling mobile broadband speed should be done in terms of specified speed levels met for 90% of users, 90% of the time, in a specified percentage (such as 70%) of the locations, based on a set of standard technical criteria for actual system performance. These criteria would include the number of simultaneous users, the distance of those users from the mobile base station, the amount of network and signaling overhead, and the total base station backhaul capacity. The target environment for wireless broadband service should also differentiate between high-speed mobile broadband, portable mobile broadband, fixed broadband, or indoor broadband coverage.

Although broadband has been discussed in the past in terms of services provided directly to end users, it has become abundantly clear that any consideration of ubiquitous, affordable access to broadband services must include a discussion of the critical high-capacity facilities that are a key component of retail broadband offerings: the special access and middle mile transport facilities that underlie both mobile and fixed broadband services and access to a Tier 1 Internet backbone. As the Commission recognized in the *Rural Broadband Report*, "[a]ccess to adequate and affordable 'middle-mile' broadband facilities...is a necessary precursor to a provider's being able to deploy broadband services to its customers" and thus, the Commission must consider "the impact special access prices have on rural broadband deployment and affordability...."[7] Unless and until special access/middle mile facilities are made available at reasonable rates, terms and conditions, the goal of ubiquitous access to broadband services at affordable prices will remain a dream (see Section IV below).

III. THE COMMISSION SHOULD RELY TO THE MAXIMUM EXTENT POSSIBLE ON COMPETITIVE MARKET FORCES TO DRIVE EXPANSION OF BROADBAND SERVICE TO UNSERVED AREAS AND UNDERSERVED GROUPS, BUT SHOULD IMPLEMENT REGULATORY SAFEGUARDS WHERE COMPETITION IS INSUFFICIENT

Consistent with the 1996 amendments to the Communications Act,[8] the Commission should seek to promote efficient, effective competition among different broadband technologies and services.[9] As the FCC previously has observed, a competitive marketplace is "the best method of delivering the benefits of choice, innovation, and affordability to American

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7 *Rural Broadband Report* at 49 and 68.

8 Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (1996).

9 *See, e.g.*, 47 U.S.C. § 257.

consumers."[10] Competition also will foster the creation of new jobs and encourage new investment, enabling the telecommunications and information sector to contribute significantly to the nation's economic recovery.

Marketplace forces will encourage rival broadband providers to reduce their costs, introduce new offerings in response to consumer demand, improve their existing networks and expand their networks to unserved areas when it is economic to do so. The first step in creating such a competitive market is to address the current bottleneck in special access or middle-mile facilities which are a critical building block for broadband networks. Such reform has the potential to significantly improve broadband deployment by independent (non-incumbent LEC-affiliated) broadband service providers, and thereby make possible the very competition that will ensure that broadband is widely available and economically priced. Once such reform is implemented, and the current stimulus funds have been distributed, the Commission can then assess whether additional funding or subsidies are required.[11]

Even in currently unserved or underserved markets, the Commission should resist calls to immediately expand the current USF system. While Sprint supports efforts to maximize access

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[10] *See, e.g., Moving Forward: Driving Investment and Innovation While Protecting Consumers,* Federal Communications Commission, at 1 (Jan. 15, 2009), *available at:* <http://www.fcc.gov/fcc-moving-forward-report.pdf>.

[11] The financial viability of the USF, and ensuring competitive and technological neutrality (a lynchpin of Commission policy), are critical goals which also must be given due weight. *See, e.g., A National Broadband Plan for Our Future*, Notice of Inquiry, 24 FCC Rcd 4342 (2009), Statement of Commissioner Robert M. McDowell ("it is critical that our plan be competitively and technologically neutral. ...[O]ur plan must not favor one particular technology or type of provider over another, even inadvertently."); *Federal-State Joint Board on Universal Service*, 12 FCC Rcd 8776, ¶¶ 49 (1997) (subsequent history omitted) ("Technological neutrality will allow the marketplace to direct the advancement of technology and all citizens to benefit from such development."); *The Commercial Mobile Alert System*, 23 FCC Rcd 6144, ¶ 33 (2008) (discussing the Commission's "well-established policy of technologically-neutral regulation").

to broadband services, we urge the Commission to proceed with caution in considering the use of universal service funds, and to adopt broadband policies that are guided by the reasonableness standard in the 1996 Act.[12] As part of this reasonableness standard, the Commission should weigh the costs of certain solutions against the benefits such solutions will provide. For example, it makes no sense to devote an inordinately disproportionate amount of resources to try to build out infrastructure to difficult-to-serve areas that do not have broadband access or that lack competitive alternatives. In some areas, satellite-based service may be the only realistic source of broadband access. Even if other intermodal alternatives are available in those areas, they may be at speeds somewhat lower than is available in other areas that are less difficult to serve.

IV. REFORM OF MIDDLE MILE SPECIAL ACCESS REGULATION IS CRITICAL TO ACHIEVING UNIVERSAL ACCESS TO BROADBAND

The Commission's efforts to promote a robust competitive broadband marketplace will require fundamental reform of its policies governing special access services. Middle mile facilities, many of which are available only as special access services from the incumbent LECs, are a critical input to virtually all forms of broadband, both wireline and wireless.[13] Unfortunately, the special access marketplace has long been dominated by Bell Operating Companies ("BOCs") and other incumbent LECs. The Commission's Phase II pricing flexibility

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[12] *See* 47 U.S.C. § 1302 (requiring the FCC to encourage deployment of advanced services "on a reasonable" basis.)

[13] "Middle mile" refers to the facilities needed to connect a carrier's local "last mile" facilities to an Internet backbone provider's network. In the context of Sprint's mobile broadband service, Sprint provides the last-mile link between the end user and Sprint's cell site, but relies on middle mile special access facilities to transport customers' traffic from its cell sites to its backbone data network (mobile switching center), and from its backbone network to the Internet backbone provider. *See* diagrams in Attachment 1.

rules have left these incumbent LECs largely unconstrained in setting special access prices in areas where they have received such relief.[14] The result has been supra-competitive prices and anti-competitive practices that have limited consumer choice by thwarting innovation and investment and by discouraging alternative providers from offering new products and services or expanding the scope of existing offerings.[15] Overpriced special access also puts a strain on the economy,[16] costing jobs and diverting needed resources from Sprint's broadband network and services.[17]

The longstanding problems caused by lack of competition for special access have been exacerbated by mega-mergers in the telecommunications industry.[18] For example, AT&T and

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[14] In adopting Phase II pricing flexibility, the FCC predicted that competition would prevent incumbent LECs from charging unreasonably high rates in areas where they were no longer subject to price regulation. *See Access Charge Reform*, Fifth Report and Order and Further Notice of Proposed Rulemaking, 14 FCC Rcd 14221, ¶ 144 (1999) ("*Pricing Flexibility Order*"). As explained below, this prediction has not been borne out. As a result, special access customers are paying more to the incumbent LECs for DS1 and DS3 channel terminations and channel mileage than they were before the advent of pricing flexibility.

[15] The lack of effective competitive or regulatory pressure on special access rates has led consumers to suffer from "higher rates, lost competition, and lost innovation." *See* letter from Chris Murray, Senior Counsel, Consumers Union, to the Honorable John Dingell, Chairman, Committee on Energy and Commerce, United States House of Representatives, at 1 (Oct. 1, 2007), Exhibit A to "Special Access Pricing," a white paper attached to letter from A. Richard Metzger, Jr., counsel to Sprint Nextel Corp., to Marlene H. Dortch, FCC Secretary, WC Docket No. 05-25 (October 5, 2007) ("*Special Access Pricing Paper*").

[16] In 2007 alone, the BOCs' over-earnings from special access amounted to $11 billion, with Verizon and AT&T accounting for over $9.0 billion of that total. *See* House Subcommittee on Communications, Technology and the Internet, An Examination of Competition in the Wireless Industry, written testimony of Paul Schieber, Vice President Access and Roaming, Sprint Nextel Corp., May 7, 2009 ("Schieber Testimony") at 12, available at: <http://energycommerce.house.gov/Press_111/20090507/testimony_schieber.pdf>.

[17] *See* Schieber Testimony at 4.

[18] *See, e.g.*, S. Derek Turner, *Dismantling Digital Deregulation: Toward a National Broadband Strategy*, at 11 (May 2009) ("Free Press Report"), available at: <http://www.freepress.net/files/Dismantling_Digital_Deregulation.pdf> (the negative impacts of

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Verizon both strengthened their already significant competitive advantages by absorbing the two leading competitive providers (MCI and legacy AT&T) of DS1 and DS3 transmission links,[19] thereby eliminating these entities as independent competitors. AT&T's merger with BellSouth also consolidated control of Cingular (now AT&T Mobility), increasing AT&T's incentives to raise the costs of its wireless rivals through increased special access prices.[20] As a result of these mergers, the special access costs that AT&T and Verizon had previously imposed on long distance companies and Cingular have been converted into nothing more than internal intra-company wealth transfers in the case of their IXC and wireless affiliates, while the excessive special access rates continue to represent a very real – and very significant – cost to Sprint and other special access customers not affiliated with incumbent LECs. This ability to raise a significant cost faced by their competitors further increases AT&T's and Verizon's incentives to drive up special access rates.

For all but the highest volume routes, incumbent LECs dominate the provision of "middle-mile" broadband links. Commission intervention in the special access market is thus

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the FCC's pricing flexibility decisions "have only been compounded by the near-total reconstruction of the old Ma Bell monopoly through the Commission's approval of the mergers between SBC and AT&T and Verizon with MCI").

[19] *See* Declaration of Gary B. Lindsey, Attachment 1 to Comments of Sprint Nextel Corp., WC Docket No. 05-25, at 5 n.3 (August 8, 2007) ("*2007 Lindsey Decl.*") (MCI and legacy AT&T collectively accounted for 21% of Sprint's DS1 purchases from alternative access vendors and 19.4% of its DS3 purchases from alternative access vendors in the top 50 MSAs).

[20] *See Implementation of the Cable Television Consumer Protection and Competition Act of 1992; Development of Competition and Diversity in Video Programming Distribution: Section 628(c)(5) of the Communications Act; Sunset of Exclusive Contract Prohibition; Review of the Commission's Program Access Rules and Examination of Programming Tying Arrangements*, Report and Order and Notice of Proposed Rulemaking, 22 FCC Rcd 17791, ¶ 54 (2007) (finding that horizontal consolidation in an industry increases the incentive and ability of companies to deny inputs to their competitors).

essential in order to foster efficient and effective competition in the downstream consumer marketplace. The Commission should reform its special access rules to regulate prices for special access in areas where incumbent LECs have been granted Phase II pricing flexibility. Without these regulatory reforms, it will be impossible for the Commission to ensure that broadband is available to all Americans.[21]

A. Special Access Services Are a Critical Input to Wireless Broadband

Mobile broadband services offer unique benefits to consumers beyond even the considerable benefits associated with other broadband offerings (see Section VI *infra*). In an effort to bring the benefits of mobile broadband to more consumers, Sprint has spent billions of dollars to deploy a 3G mobile broadband platform throughout most of its network, improve the network's performance capabilities, and increase the array of advanced services available through its mobile broadband platform. Sprint has also invested heavily in developing 4G technology and introducing 4G broadband services. These mobile broadband services will foster significant economic development and job growth.

A key component of these wireless broadband services are the dedicated "middle mile" links connecting Sprint's cell sites to its fiber rings and long-haul Internet backbone, via wireline carriers' central offices and Sprint's mobile switching centers.[22] Absent these middle mile connections, broadband networks cannot operate, leaving consumers without access to a broad

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[21] *See* 47 U.S.C. §1302(a).

[22] Middle mile connections are also essential to other forms of broadband, including the provision of fixed rural broadband and fixed office broadband services. *See* Attachment 1.

array of services.[23] The vast majority of "middle mile" backhaul connections are special access facilities (usually a combination of channel termination and channel mileage offerings) obtained from incumbent LECs. Sprint pays incumbent LECs billions of dollars annually for middle mile special access services underlying its wireless and long distance services; special access expenses represent more than one-third of the costs Sprint incurs to operate a cell site. Yet, as explained below, Sprint has virtually no competitive alternatives for these inputs and must continue to obtain them from the incumbent LECs at exorbitant rates. These excessive prices harm consumers and retard the deployment of broadband in many areas of the country. Reforming special access regulation is thus critically important to realizing Congress's goal of universal, affordable access to broadband services.

B. There is Little, If Any, Competition for Middle Mile Special Access Services

In light of the central role that special access plays in all aspects of Sprint's business, the company has every incentive to seek competitive alternatives to the incumbent LECs' overpriced special access services – especially given that the two dominant providers of special access (AT&T and Verizon) are also Sprint's two biggest wireless competitors.[24] Although Sprint

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[23] Special access is an essential input into every one of Sprint's businesses – broadband, wireless, long distance and enterprise. Special access services are also a part of virtually every communications product that consumers use every day: when consumers make wireless calls, access the Internet, send emails, swipe their credit cards at stores, or use automated teller machines, they are using services that rely on special access.

[24] AT&T and Verizon are by far the largest providers of special access, accounting for 81% of incumbent LEC special access service nationwide (*see* 2007 FCC ARMIS Report 43-01, Table 1 – Cost and Revenue, Row 1090 (Total Operating Revenues), Column (s) (Special Access). They are also the largest providers of Commercial Mobile Radio Services ("CMRS"), together accounting for approximately 60% of subscribers. *See* CTIA, "State of the Wireless Industry," *available at*: <http://www.ctia.org/content/index.cfm/AID/11498> (263 million total wireless subscribers in the United States as of June 2008); according to their annual reports, AT&T had 77 million wireless customers as of the end of 2008, and Verizon had 80 million

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actively pursues alternative sources of middle mile connections, such alternatives are rarely available, and Sprint remains dependent on the incumbent LECs (in the vast majority of cases, a BOC) for the overwhelming majority of its DS1 and DS3 facilities. For example, in 2007, 98% of the DS1 channel terminations Sprint purchased for its wireline business in the top 50 MSAs were obtained from incumbent LECs – up from 91% in 2001.[25]

Overall, for both its wireline and wireless businesses, Sprint relied on incumbent LECs' special access services for more than 96% of all DS1 and DS3 customer terminating circuits (including circuits terminating at cell sites) in the top 50 MSAs in 2006.[26] Sprint currently purchases 95% of the DS1 channel terminations needed to reach its cell sites from incumbent LECs. The lack of competitive alternatives has resulted in Sprint buying access from vendors other than the LEC at only 4% of its cell sites.[27]

Although Sprint is keenly interested in finding alternatives to the incumbent LECs, the company's efforts to obtain service from competing providers of special access service have not produced significant alternatives. For example, in January 2007, Sprint asked 77 competitive providers whether they had facilities located at any of over 52,000 Sprint cell sites. The results showed only a *de minimis* presence of competitive providers at Sprint cell sites. Sixteen of the respondents reported that they had fiber facilities located at one or more of the cell sites. But

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wireless subscribers after its acquisition of Alltel on January 9, 2009. AT&T, Inc. Annual Report (Form 10-K), at 3 (February 25, 2009); Verizon Communications, Inc., Annual Report (Form 10-K), at 3 (February 24, 2009).

[25] *See* Schieber Testimony at 5.

[26] For purposes of this analysis, MCI and legacy AT&T are treated as incumbent LECs in Verizon and AT&T regions, respectively.

[27] *See* Schieber Testimony at 6.

these facilities reached only a little over 1% of the cell sites included in the questionnaire.[28] As these results make clear, there are virtually no competitive alternatives to incumbent LEC special access services for the critical facilities needed to connect Sprint's cell sites to the rest of its network or to the Internet.

Sprint is not alone in its inability to find effective alternatives to incumbent LEC-provided special access services.[29] Indeed, the lack of competitive sources for middle mile transmission links has been well documented for years, by many different parties:

- The Commission's own data show that incumbent LECs account for well over 90 percent of wholesale special access revenues;[30]
- Legacy AT&T stated in 2003 that the BOCs do not dispute the conclusion that competitive alternatives are available only in a small number of buildings;[31]
- The Ad Hoc Telecommunications Users Committee, an organization of major U.S. businesses, has demonstrated that the incumbent LECs remain the sole source of

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[28] Comments of Sprint Nextel Corp., WC Docket No. 05-25, at 31-32 (August 8, 2007) ("Sprint 2007 Special Access Comments"); Lindsey Decl. ¶ 5. Even if competitive providers have a presence at one of Sprint's cell sites, that does not mean that they offer a viable alternative to the incumbent LEC. In most cases, the alternative provider does not have a large enough footprint in any market to allow Sprint to rely on that provider's on-net facilities for backhaul. *See* Sprint 2007 Special Access Comments at 31-32; Lindsey Decl., ¶ 6.

[29] *See* Peter Bluhm with Dr. Robert Loube, National Regulatory Research Institute, *Competitive Issues in Special Access Markets*, Revised Ed., at 41 (first issued January 21, 2009, and commissioned by the National Association of Regulatory Utility Commissioners) ("NRRI Study" or "NRRI") (noting that "Sprint's claims are generally consistent with the data we collected from Sprint and other buyers" of special access services).

[30] *See ex parte* presentation attached to letter from Anna M. Gomez, Sprint, to Marlene H. Dortch, FCC Secretary, at 3 (Aug. 22, 2007) ("Sprint Aug. 22 *Ex Parte*"), *citing* FCC Universal Service Monitoring Report, Table 1.5 and Telecommunications Industry Revenue Report, Table 5 (2005 percentage adjusted to include pre-merger AT&T and pre-merger MCI in-territory revenue in the incumbent LEC percentage). According to the Commission's data, the incumbent LECs' share of the special access marketplace was 92.7 percent in 2001; by 2005, the incumbent LECs' share had grown to 94.1 percent. *Id.*

[31] *See, e.g.*, AT&T Reply Comments, RM-10593, at 13 (Jan. 23, 2003) ("AT&T 2003 Reply Comments").

dedicated access at roughly 98% of all business premises nationwide, even for the largest corporate users;[32]

- T-Mobile showed that it has few if any alternatives to incumbent LEC special access, especially for initial links connecting its base stations to wire centers;[33]
- Other competitive providers offered additional evidence that there is little, if any, competition for DS1 and DS3 special access services.[34]

Internet and other broadband service providers have also described the lack of competitive alternatives to BOC-provided middle mile facilities, and the deleterious effects such lack of competition has on their broadband deployment efforts. Incumbent LECs other than the BOCs have stated that in most cases, they have only one choice of provider for middle mile connections,[35] and have explained that the high cost of middle mile special access poses a "significant obstacle" to deploying broadband to rural consumers and increasing the broadband speeds available to those customers.[36] ISPs large and small echo these sentiments.[37] All of these

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[32] Comments of Ad Hoc Telecommunications Users Committee, WC Docket No. 05-25, June 13, 2005, Declaration of Susan Gately at ¶ 16 ("2005 Gately Decl.").

[33] Comments of T-Mobile USA, Inc., WC Docket No. 05-25, at 6-7 (Aug. 8, 2007) ("T-Mobile Comments").

[34] *See, e.g.*, Declaration of Ajay Govil, ¶¶ 19, 27 ("Govil Decl."), attached to Comments of Covad Communications Group, Inc., NuVox Communications, and XO Communications, LLC (Redacted Version), WC Docket No. 05-25 (Aug. 8, 2007) (stating that XO will not construct facilities unless the capacity demand is at least three DS3s, and that interoffice transport routes are only justified with at least nine to twelve DS3s of traffic); *see also* Embarq Comments, WC Docket No. 05-25 at 22 (August 8, 2007) (carriers are less likely to construct facilities for lower capacities); Declaration of Don Eben, ¶ 4 ("Eben Decl."), Attachment 1 to Comments of ATX Communications, Inc., *et al.* (Redacted Version), WC Docket No. 05-25 (Aug. 8, 2007) (stating that it is rarely economical to build last mile connections at DS0, DS1 or DS3 levels to individual customer premises).

[35] *See* comments of OPATSCO, GN Docket No. 09-29, p. 9 (March 25, 2009) ("OPATSCO comments").

[36] *See, e.g.,* OPATSCO comments at 8; *see also* comments filed in GN Docket No. 09-29 on March 25, 2009 by NTCA, p. 26; and NECA, p. 6 ("the high cost of middle mile backbone connections is an obstacle to providing broadband services in low-density rural markets and these costs should be addressed in any rural broadband strategy.").

parties, like Sprint and other carriers, agree that special access/middle mile reform is essential if underserved and unserved areas are to receive affordable broadband service.

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[37] *See, e.g.*, oral comments of attendees at the NTIA/RUS BTOP public meetings, available at: <http://www.ntia.doc.gov/broadband/meetings.html>: Mark Feest, Director of External Affairs for CC Communications, Fallon, Nevada, March 17, 2009, Session 3 ("[T]here's a significant cost in getting [traffic] off your network into a fiber hotel or some other method where you can get it somewhere where there's competition in the backhaul to get to the Internet gateway."); Catherine Moyer, Pioneer Communications, March 17, 2009, Session 3 ("While the broadband network is being extended further into areas where there is little or no service, many companies cannot afford the large middle mile facilities to connect these customers to the Internet backbone"); Al Silverman, Vice President and General Counsel of Cable One, March 18, 2009, Session 2 ("The fiber backhaul or backbone to small towns and to rural areas is a bottleneck. [G]etting to the national fiber network is very, very difficult if not impossible to do."); Gaylen Updike, Telecommunications Development Director, Government Information Technology Agency, State of Arizona, March 18, 2009, Session 2 ("[M]iddle mile is the key issue."); Evelyn Jerden, CPA, Lynch Interactive Communication Technology, March 18, 2009, Session 2 ("[M]iddle mile cost is a critical component."); unidentified Phoenix-based ISP provider, March 18, 2009, Session 2 ("[O]ne of the biggest challenges for us is the middle mile. It's very costly to provide ...we really do need to come up with a way to resolve the middle mile cost issue."); John Lucas, Chief Information Officer, Graham County, March 18, 2009, Session 2 ("The real problem is the middle mile. The middle mile is an entry barrier to local ISPs. Basically if you're an ISP in Graham County, you have to pay four times the cost of an ISP in Maricopa County. They can't function because they're having this barrier to entry and it also keeps other people from coming in because of the cost."); Kelly Bonnham (representative of a rural last mile and backhaul provider), March 19, 2009, Session 3 ("We pay on some of our networks when we get rural service from other carriers as much as $700 a megabit for backhaul."). *See also*, Comments filed in GN Docket No. 09-29 on March 25, 2009 by DigitalBridge Communications Corp. ("DBC"), at 8-9 ("The lack of middle mile infrastructure is one of the greatest obstacles to building sustainable rural broadband networks.... DBC has been able to bring cost-efficient and affordable wireless broadband to rural communities, but only where it has access to affordable middle mile backhaul. When considering markets to serve, one of DBC's essential considerations is whether it can acquire middle mile backhaul facilities at economic rates."); Mark Bayliss, President Visual Link Internet, at 1 ("If the ISP's prices for Internet backhaul bandwidth are $100.00 per Mbs and the ISP has to deliver 3 Mbs to the customer with a QOS of 10 to 1 this would cost the ISP $30.00 per customer in Internet bandwidth per month. [With the addition of other costs, this results in a cost per customer that] would clearly be out of range of most families in the underserved regions."); Qualcomm Incorporated, at 10 ("[T]he costs even to extend mobile broadband into these [rural] areas, especially for back haul, are substantial.").

The evidence in all of these numerous filings is buttressed by reports issued by independent organizations, such as the Government Accountability Office ("GAO") and the National Regulatory Research Institute ("NRRI"), demonstrating that the incumbent LECs, particularly AT&T and Verizon in their respective home regions, dominate the marketplace for middle mile links.

Perhaps the most telling statistics come from a recent study of competitive issues in special access that NRRI prepared at the request of the National Association of Regulatory Commissioners ("NARUC"). In its report issued in January 2009, NRRI concluded that incumbent LECs "still have strong market power in most geographic areas, particularly for channel terminations."[38] NRRI found that incumbent LECs provide 99% of DS1 channel terminations, 98% of the DS1 transport market, and 91% of the market for DS3 channel terminations.[39] All of these services provide critical middle mile connections needed to offer a variety of broadband services. NRRI's findings echo an earlier report issued by GAO, which found a lack of facilities-based competition for incumbent LEC special access services,[40] and are

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38 NRRI Study at iii, 79; *see also id.* at 47 ("Overall, the market concentration data portray special access as a dominant firm-competitive fringe market. In this kind of market, one firm, such as the ILEC, dominates, and other providers both individually and collectively have a small market share and little influence on price.").

39 *See* NRRI Study at 45-46.

40 For example, the GAO reported that its survey of 16 major metropolitan areas showed that facilities-based competitors were serving, on average, less than 6 percent of the buildings with at least a DS1 level of demand. United States Government Accountability Office ("GAO"), Report to the Chairman, Committee on Government Reform, House of Representatives, *Telecommunications: FCC Needs to Improve its Ability to Monitor and Determine the Extent of Competition in Dedicated Access Services*, GAO Report No. GAO-07-80, at 12 (Nov. 30, 2006), *available at*: <http://www.gao.gov/new.items/d0780.pdf> ("GAO Report").

consistent with the conclusions and call for reform contained in the May 2009 Free Press Report.[41]

C. Lack of Competition Has Resulted in Overpriced Middle Mile Special Access Services

The lack of meaningful competition for special access services, coupled with premature grant of Phase II pricing flexibility, has allowed incumbent LECs to charge excessive prices for these services.[42] The unreasonableness of these prices are reflected in: (1) the astonishing rates of return incumbent LECs have been earning on special access; (2) the inflated rates charged for special access compared to cost-based unbundled network elements ("UNEs"); and (3) the discrepancy between special access rates and prices for comparable services offered in competitive environments.

1. Excessive rates of return

According to ARMIS reports filed with the Commission, the BOCs have earned what are by any measures extraordinary (and escalating) rates of return on their special access services:

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[41] *See* Free Press Report at 11 (the FCC wrongly predicted meaningful competition in the special access market and must "reverse course here and apply a more meaningful approach to regulating the enterprise, special access and middle-mile transport markets"); *id.* at 118 ("We suspect that an honest market power evaluation will lead the Commission to conclude that none of the markets [where pricing flexibility was granted] should have been granted MSA-wide regulatory relief.").

[42] Phase II pricing flexibility allows LECs to offer special access service at unregulated rates through generally available tariffs and contract tariffs. Phase I pricing flexibility allows price cap LECs to offer contract tariffs and volume and term discounts for those services for which they make a specific competitive showing (although under Phase I, the price cap LECs must maintain their generally available, price cap-constrained tariffed rates for these services). *See Pricing Flexibility Order*, ¶4.

	2000	2001	2002	2003	2004	2005	2006	2007
AT&T	40.2%	56.2%	54.3%	63.5%	76.5%	94.5%	99.9%	137.6%
Verizon	11.5%	18.3%	20.8%	19.5%	28.4%	37.5%	47.7%	59.1%
Qwest	38.1%	44.7%	57.7%	65.8%	75.1%	109.4%	132.2%	175.4%

Source: FCC Report 43-01, Table 1, Special Access net return (row 1915) divided by average net investment (row 1910)

As Free Press has pointed out, these "obscene" special access rates of returns understate the returns earned by the BOCs in areas in which they have received Phase II pricing flexibility, because the overall special access returns include areas that are still subject to price caps or that have been granted only Phase I pricing flexibility.[43] As GAO found, the incumbent LECs' prices are higher in those areas in which the LEC has been granted Phase II pricing flexibility than in those areas still under Phase I or price caps.[44] Thus, averaging rates of return across study areas subject to different pricing rules masks how egregious the incumbent LECs' special access prices are in areas where there is little or no price regulation. Free Press notes that in 2007, Verizon had several study areas in which it reported earning between 500-700%, and that seventy percent of BOC study areas experienced special access rates of return greater than 100%, with the top ten study areas all exhibiting returns greater than 250%.[45]

2. Special access rates compared to UNE rates

Excessive rates of return are not the only evidence that incumbent LECs are pricing special access services at unconscionably high levels. In a competitive marketplace, one would

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43 *See* Free Press Report at 57.

44 *See* GAO Report at 27-28.

45 *See* Free Press Report at 57-58.

reasonably expect that competition would drive prices toward the costs of providing service.[46] The evidence demonstrates, however, that special access rates significantly exceed the economic costs of providing special access service.

For example, Sprint compared price cap (PC) and price flex (PF) special access rates in a sample of five states in AT&T territory and four states in Verizon territories with the charges for comparable UNEs (two channel terminations and one ten-mile channel mileage circuit).[47] This analysis showed that special access prices -- both price cap and price flex -- far exceed the prices for comparable UNEs:

	UNE	PC	% Diff	PF	% Diff
DS1 Circuit	$ 205.49	$ 411.27	100%	$ 457.63	123%
DS3 Circuit	$ 2,128.52	$ 2,994.28	41%	$ 3,705.38	74%

It bears emphasis that the special access rates examined by Sprint were those offered by the BOCs in exchange for a five-year term commitment, which generally reflect the most generous discounts available from the incumbent LECs, to the month-to-month UNE price of a functionally equivalent circuit. It is also worth noting that UNE rates are determined through an administrative process in which the incumbent LEC is a key participant, and are designed to

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[46] *See, e.g.*, Comments of Verizon Wireless, CC Docket No. 01-92, at 11 (Oct. 25, 2006) ("[c]ompensation should be provided with reference to the cost of providing service").

[47] Sprint's analysis is based on the price cap and price flex rates charged by AT&T in Wisconsin, Texas, Ohio, Michigan and California (Americtech FCC Tariff No. 2, Section 21; Pacific Bell FCC Tariff No. 1, Section 31; and Southwestern Bell FCC Tariff No. 73, Section 39) and by Verizon in Pennsylvania, New York, Massachusetts and Maryland (Verizon FCC Tariff No. 1, Sections 30 and 31, and Verizon FCC Tariff No. 11, Sections 30 and 31), to UNE rates. The rates in the table below are simple averages across different zones.

approximate the prices that a competitive market would produce.[48] Sprint's analysis demonstrates the consequences of premature grant of pricing flexibility to a carrier with market power: where competitive pressures are insufficient to restrain a dominant carrier's prices, that carrier is likely to charge excessively high prices in the absence of any countervailing regulatory protections.

3. Other market-based evidence that special access services are overpriced

In addition to the UNE comparison and the rates of returns cited above, other market-based evidence also shows that the BOCs' special access prices are set well above economically efficient levels. For example, although DSL service provides speeds comparable to a DS1,[49] there is a substantial contrast in the prices for the two types of services. Sprint's average monthly cost for a DS1 circuit (2 channel terminations and 10 channel miles, under a 5 year term plan) is approximately $390.00. In contrast, AT&T and Verizon will provide high-speed Internet access - including services that are substantially faster than a 1.544 Mbps DS1 - for a fraction of that rate:[50]

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48 *See Implementation of the Local Competition Provisions in the Telecommunications Act of 1996,* 11 FCC Rcd 15499, ¶ 679 (1996); *aff'd sub nom. Verizon v. FCC*, 535 U.S. 467 (2002); *see also* Embarq Comments, WC Docket No. 05-25 at 20 (August 8, 2007) (forward looking costs - which are the basis of UNE rates - are more appropriate than ARMIS for measuring the costs of special access services).

49 Verizon Reply Comments (Redacted Version), WC Docket No. 05-25 at 35 (August 15, 2007) (acknowledging that broadband services such as DSL and FiOS provide speeds that are "comparable to or greater than DS1 facilities.").

50 *See* AT&T, available at: <http://www.usa.att.com/dsl/plans/index.jsp>; Verizon, available at: <https://www22.verizon.com/Residential/Internet>.

Verizon Starter Plan (1 Mbps)	$17.99
Verizon Power Plan (3 Mbps)	$27.99
Verizon Turbo Plan (7.1 Mbps)	$37.99
Verizon FiOS (10 Mbps)	$44.99
AT&T Starter DSL (1.5 Mbps)	$19.95
AT&T Preferred DSL (3 Mbps)	$29.95

The reason for this discrepancy is simple: AT&T and Verizon face direct competition from cable companies in the provision of high-speed internet access to residential consumers. This competition forces the BOCs to charge more reasonable rates in order to attract and retain customers. Where there is little or no competition (in the special access marketplace), the incumbent LECs' rates are 10 or 20 times higher than the competitive retail broadband rates. Based on information submitted by BT Americas, similar discrepancies exist between incumbent LEC special access rates and the cost-based rates for similar services in the United Kingdom.[51] As these facts make clear, the lack of competition has allowed incumbent LECs to continue to charge excessive prices for special access services.[52]

D. Supra-competitive Special Access Rates Harm Consumers

The excessive prices that incumbent LECs charge for special access have significant distorting effects on the downstream consumer marketplace for broadband services. By increasing the costs for essential inputs to broadband services, inflated special access rates lead to higher prices for consumers of broadband, and tilt the competitive playing field in favor of those firms that both control the provision of special access and provide retail broadband services

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[51] BT Americas Comments, WC Docket No. 05-25, at 16-17 and Attachment A (August 8, 2007) (comparing BT's "fully incremental cost-based special access rates in the U.K. with the BOCs' prices for DS1s and DS3s, using the Purchasing Power Parities Rate analysis").

[52] *Cf. Pricing Flexibility Order* ¶ 144 (predicting that competition would drive down rates in areas where the BOCs were granted pricing flexibility).

to consumers.[53] Furthermore, by raising the cost of providing broadband, unreasonably high special access rates reduce the area in which competitive deployment of broadband can occur. Excessively high input prices charged by a monopoly carrier may make it economically unattractive for an independent broadband service provider to deploy facilities in a given area, and may lead the Commission to conclude (mistakenly) that universal service support is needed to ensure broadband services in unserved or underserved areas.[54] In reality, however, deployment might well be financially feasible, without any universal service support, if special access rates were reduced to more reasonable levels.

The lack of effective regulation has also allowed incumbent LECs to entrench their dominance over middle mile facilities. As shown above, marketplace forces have failed to put downward pressure on the BOCs' special access prices. Ordinarily, one would expect that high profits and a lack of competition would attract new entrants.[55] However, there are significant barriers to entry that have deterred competitive entry into the special access and middle mile

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[53] *See, e.g.*, Free Press Report at 53 (firms that control bottleneck facilities, such as special access or middle mile facilities, can stifle market entry by setting wholesale prices so high that competitors are unable to resell the services at a profit).

[54] For example, assume that consumers are willing to pay $X per month for broadband services. Excessive special access prices may drive the cost of providing broadband in a given area above $X per month, rendering it uneconomic for firms to provide broadband in that area at the prevailing price of $X. The resulting lack of broadband offerings in the area may lead the Commission to target that area for USF support when, in fact, the real problem is excessive special access prices. As a consequence, if broadband were to become eligible for high-cost support, an incumbent LEC might receive a subsidy for its retail broadband offerings while its middle mile special access prices effectively would deter competitive entry. In fact, the support would be enabling the excessive special access prices rather than expanding broadband availability since with cost-based special access prices, the market would result in broadband service being provided to the area.

[55] *See, e.g., Pricing Flexibility Order* ¶ 144 (predicting that if an incumbent LEC charged unreasonably high rates for access services it would attract competitive entry); Free Press Report at 59; GAO Report at 17-18.

businesses, including the cost of infrastructure investment, zoning and rights-of-way complications, the difficulty in digging up streets and sidewalks, and problems with intra-building access.[56] More directly, however, and as discussed in greater detail below, the incumbent LECs have engaged in a variety of anticompetitive practices, including their tariff and contract provisions, that are designed to discourage middle mile customers from seeking alternative providers.[57]

Special access customers have pursued a variety of alternatives in an attempt to relieve their dependence on incumbent LECs. Sprint, for example, has tried to use alternative technologies to replace incumbent LEC special access, where feasible. These technologies have limitations, however, which have prevented them from broadly supplanting traditional special access services.[58] One potential option in rural areas is the use of a portion of the unused broadcast television spectrum ("White Spaces") to provide robust fixed wireless connections. Though limited in location and feasibility across much of the country's most developed

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[56] As the FCC has noted, "[m]ost of the cost of providing a special access line is in the support structure, *i.e.,* the trenches, manholes, poles, and conduits, the rights-of-way, and the access to buildings, not in the fiber strand or copper wires that share the support structure, rights, and access." *Special Access Rates for Price Cap Local Exchange Carriers; AT&T Corp. Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services*, Order and Notice of Proposed Rulemaking, 20 FCC Rcd 1994, ¶ 26 (2005) ("*2005 Special Access NPRM*"), *citing AT&T Petition for Rulemaking*; *see also, e.g.*, GAO Report at 13; *Unbundled Access to Network Elements*, Order on Remand, 20 FCC Rcd 2533, ¶¶ 150-153 (2005).

[57] *See* section IV.E., *infra.*

[58] *See, e.g.,* Govil Decl., ¶¶ 22-24 (cable companies do not offer wholesale access services to competitors and, even if these services were available, the cable companies cannot offer sufficient service level guarantees to support competitive services); *id.* ¶ 21 (fixed wireless is not a viable option); *see also* Special Access Pricing Paper at 23-24.

telecommunications areas, these connections provide a comparatively inexpensive alternative to traditional fixed wireless services for middle mile backhaul.

The major obstacle preventing the deployment of this technology is that White Space spectrum has not been licensed for fixed wireless service. Although the FCC has allowed *unlicensed* use of this spectrum, providers need access to licensed spectrum to ensure service levels and reliability they need to offer broadband to end users.[59] Many end users of wireless broadband – including commercial mobile providers, first responder networks and government or medical buildings – demand rigorous service level agreement standards for signal availability and other service quality factors.[60] These demands can only be met by using licensed spectrum for the wireless backhaul and transport connections needed to serve these customers. Sprint urges the Commission to reconsider its decision in the White Spaces proceeding and dedicate a portion of the White Spaces spectrum to fixed, licensed use to support essential middle mile broadband infrastructure. Although the licensing of White Spaces spectrum is not a panacea that will introduce broad competition to all special access services throughout the country, it may provide targeted relief on a case-by-case basis by offering a cost-effective alternative in some rural areas where broadband access is sorely lacking.[61]

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[59] *Unlicensed Operation in the TV Broadcast Bands*, Second Report and Order and Memorandum Opinion and Order, 23 FCC Rcd 16807 (2008).

[60] *See* letter from Rural Telecommunications Group ("RTG"), FiberTower Corp., COMPTEL, and Sprint to Marlene H. Dortch, FCC Secretary, GN Docket No. 09-29 at 2 (March 25, 2009).

[61] White Spaces's exceptional propagation characteristics make it ideal for rural areas in need of lower-cost, long range wireless backhaul solutions. *See, e.g.,* letter from Kurt van Wagenen, FiberTower Corp., in ET Docket Nos. 04-186 and 02-380 at 1 (Oct. 28, 2008); letter from Aloha Partners, *et al.* to Marlene H. Dortch, FCC Secretary, in ET Docket Nos. 04-186 and 02-380 at 2 (Oct. 31, 2008); letter from RTG, NTCA and RICA in ET Docket Nos. 04-186 and 02-380 at 2 (Oct. 24, 2008) (noting that "[w]ith lower build-out expenses, service can be

Footnote continued on next page

E. The Incumbent LECs Use Exclusionary Pricing Practices and Other Anti-Competitive Tactics to Maintain Their Dominance

Companies in various industries often provide services to customers under exclusive arrangements that "lock up" the demand of the purchaser for the supplier's services and prohibit the customer from looking elsewhere for those services. In competitive marketplaces with multiple suppliers, such exclusive arrangements generally do not result in competitive harm.[62] However, when a single supplier is dominant in the provision of an essential input service such as special access/middle mile facilities, exclusive arrangements can be used to raise the cost of the supplier's rivals to provide downstream competitive services and increase the dominant supplier's power over the price of those downstream services.[63]

Where a competitor in a particular line of business must obtain a substantial share of the existing market to achieve economies of scale, a company with market power need deter only a small fraction of its customers from switching providers to convince a potential rival not to enter

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deployed at lower costs in rural areas," ensuring that carriers "have the ability to 'serve critical rural broadband access needs immediately and cost-effectively.'").

[62] In competitive markets, customers can choose between different suppliers to satisfy their demand. Exclusionary or anti-competitive possibilities arise when there is only one firm capable of meeting each customer's entire demand. In that situation, the dominant company can use exclusive arrangements to preclude incremental competitive entry. *See Anticompetitive Exclusion: Raising Rivals' Costs to Achieve Power over Price*, T. Krattenmaker & S. Salop, 96 Yale L.J. 209 (1986); *LePage's Inc. v. 3M*, 324 F.3d 141, 158 (3d Cir. 2003) (citations omitted) ("[d]iscounts conditioned on exclusivity are 'problematic' 'when the [supplier] is a dominant firm in a position to force manufacturers to make an all-or-nothing choice.'").

[63] Exclusionary pricing schemes are particularly attractive to dominant firms, such as the BOCs, because exclusionary pricing – unlike predatory pricing, for example – does not require the dominant provider to set prices below its own costs. Exclusionary pricing therefore can be virtually costless to the dominant company.

the market.[64] The key to successful exclusionary pricing is to condition more attractive pricing for input services that are not subject to competition on the selection of the dominant firm for the inputs services for which potential competitive entry is a realistic possibility. In other words, a customer must pay a higher price for the non-competitive services if it purchases the competitive services from another provider. AT&T and Verizon have adopted such exclusionary pricing strategies in their provision of special access[65] - they are able to dominate the provision of both channel terminations and channel mileage, because *no other supplier can satisfy the entire demand for those services in the AT&T and Verizon service territories*. AT&T and Verizon have used these advantages – advantages they achieved not through their superior business acumen but through their historical monopoly position prior to the passage of the 1996 Act - to discourage competitive entry.

As is clear from the discussion above, special access rates charged by AT&T, Verizon and other incumbent LECs, even net of any applicable volume and term discounts, are unreasonable and excessive. Apart from tying arrangements alluded to above, Sprint and other customers are forced to subscribe to incumbent LEC volume or term plans simply to avoid outrageously expensive "rack rates" (non-discounted rates assessed on customers who purchase special access on a month-to-month basis). However, the discounts off rack rates available through a volume or term plan come at a different kind of cost: incumbent LECs have made the discounts contingent upon accepting terms and conditions which effectively prevent the service

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[64] Less than full requirements contracts can be exclusionary if they tie up sufficient volume to prevent smaller competitors from achieving minimum viable scale.

[65] *See, e.g.*, Comments of Time Warner Telecom and One Communications Corp. (Redacted Version), WC Docket No. 05-25 at 36-42 (August 8, 2007); COMPTEL comments, WC Docket No. 05-25, at 9-15 (August 8, 2007); Sprint 2007 Special Access Comments at 24-29.

subscriber from switching even a portion of its demand to an alternative access vendor, even in the limited locations in which such alternatives are available. In Sprint's experience, incumbent LECs such as AT&T and Verizon have relied upon five particularly onerous categories of terms and conditions to lock in subscribers and forestall competitive inroads:

- Commitment levels set at up to 100% of current demand levels;
- Shortfall penalties if actual demand falls below specified levels;
- Overage penalties if actual demand exceeds specified levels;
- Termination liabilities for exiting the plan prior to the scheduled expiration date; and
- Onerous circuit migration charges and restrictions.

Commitment levels: Both AT&T and Verizon condition availability of discounted rates on volume commitments. For example, the Southwestern Bell, Pacific Bell and Nevada Bell DS-1 term plans set the portability commitment level at 100% of the channel terminations provided by the incumbent LEC in the month prior to the commitment; Ameritech sets the commitment level at 90% of the in-service count.[66]

Verizon similarly has commitment levels between 85-100%, depending upon the plan and the service, and in addition, conditions certain of its discounts upon the in-service count for each rate element.[67] The individual rate element condition is especially problematic: while a carrier might find it economic to build some of its own interoffice transport facilities, it is

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66 *See* SBC FCC Tariff No. 73, Section 7.2.22; Pacific Bell FCC Tariff No. 1, Section 7.4.18; Nevada Bell FCC Tariff No. 1, Section 7.11.5.2; Ameritech FCC Tariff No. 2, Section 7.4.13.

67 *See, e.g.,* Verizon FCC Tariff No. 1, Section 25.3.1 (National Discount Plan has 85-90% commitment level for each rate element); Verizon-West FCC Tariff No. 14, Section 5.6.14 (90% of in-service count); Verizon-East FCC Tariff No. 1, Section 7.2.13 (100% of in-service DS-0s); Verizon-East FCC Tariff Nos. 1 and 11, Section 25.1 (90% of in-service DS-1s and DS-3s).

sharply discouraged from doing so because the discount on low volume channel terminations (which are rarely economic to self-provision) is tied to purchase of interoffice transport from Verizon. These conditions leverage the carrier's near-total market power for channel terminations into greater control of the market for interoffice transport service, where competition is marginally more feasible. Thus, this tariff requirement clearly undermines the Commission's goal of encouraging facilities-based competition.

Although described as discounts by AT&T and Verizon, volume-based pricing practices are more accurately described as penalties that punish customers that do not buy the vast majority of their services from the BOC. Because AT&T's and Verizon's baseline rates are well above competitive levels, the discounts off their rack rates do not generate genuine "savings" compared to the rates that would be available to customers in a competitive market. Moreover, the incumbent LEC "discounts" do not appear to be based in any way on its own cost structure (*i.e.,* the savings an incumbent LEC realizes by providing services in bulk). The volume "discount" is based on the subscriber's commitment rather than to its absolute level of demand.[68] Thus, such a discount plan appears to be driven more by an incumbent LEC's desire to limit its customers' purchases from competing providers than by the savings involved in serving larger volume customers.

AT&T and Verizon also restrain competition by linking the discounts to historical demand levels of their purchasers. In markets where the purchaser's level of output is

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[68] For example, an AT&T customer with $10 million in total annual special access purchases would have to purchase $9.5 million worth of those requirements (95%) in order to be eligible for the "volume" discount. Another AT&T customer, with $100 million in annual purchases, would have to purchase $95 million worth of services to obtain the same percentage discount.

decreasing, these limits can further restrain a purchaser's ability to seek competitive sources of access services. For example, assume that Purchaser X's discount for special access services was based on an historical annualized amount of $100 million. Further assume that Purchaser X was eligible for the discount only if 90% or more of its special access needs were purchased from the incumbent. If X's sales decreased (possibly because it lost downstream retail customers to the incumbent rival) and X only purchased $90 million from the incumbent, X could not purchase any access services from the incumbent's competitors without losing the discount and becoming liable for contractual penalties.

AT&T has even tariffed a volume discount plan – the MVP Plan -- which requires the subscriber not only to make an annual revenue commitment based on its total recurring billing for all MVP-qualified access services (prior to any MVP discounts) for the previous three months, multiplied by 4; but also to demonstrate to AT&T that four percent of all services purchased under the plan were previously provided by a carrier other than AT&T or its affiliates.[69]

Shortfall penalties: Subscribers face penalties if their actual special access purchases fall below the level specified in their volume discount plan. While in theory, the application of shortfall penalties can be economically justifiable, many of the actual penalties imposed by the dominant incumbent LECs are so onerous as to be unreasonable. For example, several of the AT&T LECs calculate the shortfall penalty using the channel termination non-recurring charge (NRC), rather than the monthly recurring charge (MRC) or a portion thereof, even though the $900 NRC can

[69] Ameritech FCC Tariff No. 2, Sections 22.20.3(C) and 22.20.5(A).

be many times higher than the MRC.[70] In addition, certain incumbent LECs that have a multi-state operating territory (*e.g.*, Ameritech) compute commitment levels on a state-specific basis; an overage in one state cannot offset a shortfall in another state. The magnitude of shortfall penalties discourages competitive entry by deterring customers from self-provisioning or from subscribing to a competitive provider.[71]

Overage penalties: Although one might expect an incumbent LEC earning a triple-digit rate of return on special access services to be pleased if its subscribers' demand was higher than the committed-to quantity, AT&T actually imposes a stiff penalty when its volume plan customers' demand is too high. For example, if a customer's DS-1 channel terminations exceed 150% of the committed level (under the 5-year term plan), Ameritech charges the non-discounted month-to-month rate on all channel terminations above the commitment level (not, for example, on demand above the 150% maximum allowable level).[72] Southwestern Bell, Pacific Bell, Nevada Bell and Southern New England Telephone allow the subscriber to exceed the committed level by 24%; all DS-1 channel terminations above that level are assessed the NRC (not even the applicable MRC).[73] The NRC for SWB and Pacific Bell is $900; $412.50 for Nevada Bell; and the lowest NRC for SNET is $600.

Termination liabilities: As with for shortfall penalties, liability for early termination of a term plan seems reasonable in theory. However, here again, the actual penalties assessed are

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70 *See, e.g.*, SWB FCC Tariff No. 73, Section 7.3.10.

71 Reply Declaration of Joseph Farrell, attached to Reply Comments of CompTel, *et al.*, WC Docket No. 05-25 (July 29, 2005); GAO Report at 30.

72 *See* Ameritech FCC Tariff No. 2, Section 7.4.13.

73 *See* SWB FCC Tariff No. 73, Section 7.2.22; Pacific Bell FCC Tariff No. 1, Section 7.4.18; Nevada Bell FCC Tariff No. 1, Section 7.11.5.2; and SNET FCC Tariff No. 39, Section 2.11.1.1.

excessive. For example, SWB, Pacific Bell, and Nevada Bell calculate early termination liability for the portability commitment option associated with a term plan by multiplying the number of committed circuits by the undiscounted month-to-month rate by the number of months remaining in the term plan.[74] A more reasonable early termination liability would be based on the discounted rate times some factor which could vary depending upon the length of time the customer had actually participated in the plan. In any event, the threat of large termination penalties sharply reduces a customer's economic ability to move traffic off AT&T's network prior to the completion of the term, and thus reduces the ability of competition to constrain special access prices.

Circuit migration charges and restrictions: The incumbent LECs assess very high rates to perform a circuit migration -- as high as $1,125 *per circuit*[75] plus, in some cases, hourly overtime labor charges. These migration charges are assessed even if the move involves nothing more than a few keystrokes and a re-route of the circuit from one port in a central office to another port a few feet away in the very same office. Sprint rarely, if ever, migrates a circuit that requires trenching or other such time-consuming or labor-intensive truck rolls; in almost every circuit migration case, Sprint is simply switching the circuit from the incumbent LEC to a competitive LEC collocated in the incumbent LEC's central office, with no change to the customer termination point. In such circumstances, it is difficult to understand how a several hundred dollar move charge per circuit can be just and reasonable.

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74 *See* SWB FCC Tariff No. 73, Section 7.2.22; Pacific Bell FCC Tariff No. 1, Section 7.4.18; and Nevada Bell FCC Tariff No. 1, Section 7.11.5.2.

75 *See* Attachment 2, citing BellSouth FCC Tariff No. 1, Sections 7.4.5(A) and (B) and Section 7.5.9.

In evaluating an offer from an alternative access provider, Sprint must factor in the non-recurring move charges it will incur from the incumbent LEC to migrate the circuit from the incumbent LEC to the competitive LEC port. In some instances, the several hundred or thousand-plus dollar incumbent LEC migration fee can make the competitive LEC offer uneconomic. At a minimum, these fees extend the break-even time period.[76] Thus, excessive move charges are an extremely effective means of discouraging an existing special access service subscriber from switching existing circuits from the incumbent LEC to an alternative access vendor.

Incumbent LECs also impose restrictions on the number of circuits a customer may migrate. The AT&T LECs, for example, limit the number of circuits a customer may migrate to 10 per night, either four or five nights per week; the Verizon LECs limit the number of circuits to 5 per carrier account team center (CATC), 4 nights per week.[77] Taking into account weekends, holidays, and not-on-call days, a migration project involving a hundred circuits (again, a few keystrokes and an intra-office move) could thus take up to a month to accomplish because of incumbent LEC circuit migration restrictions.

It has also been Sprint's experience that incumbent LECs – whether by accident or design – can impede a project that involves migrating facilities (generally transport facilities rather than the tail circuits for which competitive alternatives are rarely available) off the incumbent LEC

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[76] Consider, for example, the economics of switching a DS-1 circuit. The average incumbent LEC rate for a DS-1 is approximately $390 per month. If a competitive access vendor offers Sprint an equivalent DS-1 facility at 10% less than the incumbent LEC rate (a savings of approximately $40 per month), but Sprint has to pay a $500 migration charge to the incumbent LEC, the break-even point just to recoup the incumbent LEC migration charge is more than a year ($500 divided by $40 = 12.5 months).

[77] *See* Attachment 2.

network through slow communication, insistence on correcting even minor discrepancies before the project can proceed, and refusal to work on a partial project unless every part of the project is ready to move forward. For example, Sprint has been attempting to migrate 12 circuits in Florida since the last week of March 2009. Some of these 12 circuits are scheduled to be disconnected, and AT&T has refused to proceed with the migration order - even for the circuits not scheduled for disconnection - until the disconnection has been completed. In another case, Sprint submitted a migration order in early October 2008, and had a scheduled (by Verizon) completion date of December 31, 2008. Due to turnover, apparent inexperience, or other factors on the part of the Verizon project managers assigned to this project, this circuit migration remains uncompleted today.

To promote competitive entry and expansion in the special access business, and thereby ensure that the market for broadband will not be adversely affected, the Commission should find that excessively onerous terms and conditions such as those described above are unjust and unreasonable, and thus may not be included in price cap LECs' special access offerings. Such a finding will alleviate some of the anti-competitive factors which have inhibited broadband deployment.

V. THE EXISTING UNIVERSAL SERVICE MECHANISM CANNOT SUPPORT BROADBAND SERVICES.

One of the goals reflected in the NOI is "for every American citizen and every American business to have access to robust broadband services" (para. 5). This is a laudable goal which Sprint supports and is actively promoting through its aggressive deployment of 3G and 4G wireless technologies and services across the Nation. However, Sprint cautions against relying upon the existing universal service mechanism to meet this ambitious goal, and recommends that the Commission not turn the current USF into a source of funding for "new programs

specifically to provide broadband support" (NOI, para. 41). Private investment is proving to be very robust in the large majority of markets in the United States, and the $7.2 billion in Broadband Technology Opportunities Program ("BTOP") grants established under the American Recovery and Reinvestment Act of 2009 ("ARRA")[78] should help to further promote broadband deployment. Where competitive market forces are unable to generate sufficient broadband access, focused programs such as BTOP would be far better suited to achieve the goals than would use of the current, increasingly outdated high-cost USF mechanisms. Until the existing high-cost USF mechanisms are fundamentally resized and reformed, until the new federal broadband deployment programs are fully implemented, and until special access/middle mile reform is given a chance to work, it is premature to establish additional support mechanisms.

A. Market Forces Are Sufficient to Encourage Broadband Deployment in Most Parts of the United States.

There is no dispute that rapid deployment of broadband services is a legitimate and laudable public interest goal. There is also no dispute that numerous companies are aggressively deploying broadband services today – without the promise or expectation of government subsidies. The market is demanding increasingly higher speed audio, video and data applications, and service providers have obviously concluded that the market will generate sufficient economic rewards to make provision of these services financially worthwhile. There is no need for the government to interfere with market forces by providing unwarranted subsidies and imposing the concomitant regulatory burdens.

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78 Pub. L. No. 111-5, 123 Stat 115 (2009).

The array of broadband services currently available or in the process of deployment is impressive, and customers are flocking to these high speed services in record numbers. For example:

- Sprint has mobile broadband network (EV-DO) coverage in 18,600 US cities and 1832 airports, reaching over 270 million people. In 2008, prior to creation of the "new" Clearwire, Sprint invested approximately $560 million in WiMAX capital expenditures.

- Clearwire (whose strategic investors include Sprint, Intel Capital, Google, Comcast, Time Warner Cable, and Bright House Networks) expects to have deployed the first fourth generation (4G) nationwide broadband mobile in 9 major U.S. markets by year-end 2009, and to have 4G coverage in 80 cities in the U.S., covering as many as 120 million people, by year-end 2010, using mobile WiMAX technology. In 2008, Clearwire received $3.2 billion in cash from its investors, which it expects to use primarily "to expand our mobile WiMAX network in the United States, for spectrum acquisition and for general corporate purposes."[79]

- Verizon has reported that its 3G broadband network covers approximately 281 million people, and that it expects to offer 4G LTE-based service in certain markets in 2010. In the first quarter of 2009, it added 252,000 new broadband connections (for a total of 8.9 million connections) and 298,000 new FiOS Internet customers (for a total of 2.8 million such customers).[80]

- AT&T announced that in the first quarter of 2009, 40.8% of its postpaid wireless subscribers had a 3G device; that it gained 471,000 new broadband connections to a total of 16.7 million; and that it gained 284,000 new U-Verse TV subscribers to a total of 1.3 million.[81] Its 3G network is deployed in nearly 350 major metropolitan areas in the U.S., with 20 additional areas planned for later this year; AT&T also recently announced plans to upgrade its mobile 3G network to High Speed Packet Access 7.2 technology, and to deploy LTE technology beginning in 2011, as part of its $17-18 billion capital expenditure plan for 2009.[82]

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79 *See* Clearwire 2008 Annual Report, pp. 7, 68.

80 *See Verizon Communications Reports Revenue, Earnings and Cash Flow Growth in 1Q 2009,* news release issued April 27, 2009.

81 *See AT&T's First-Quarter Results Highlighted by Wireless Gains, U-verse TV Growth, Double-Digit Increase*, news release issued April 22, 2009.

82 *See AT&T to Deliver 3G Mobile Broadband Speed Boost*, news release issued May 27, 2009.

- Other incumbent LECs also continued to report strong growth in broadband subscribership in the first quarter 2009. For example, Qwest announced that it had 2.9 million broadband subscribers, an increase of 7% over year earlier results,[83] and Embarq announced that it gained 40,000 new high-speed Internet subscribers, "a 67% increase over each of the last three quarters of 2008."[84]

- Cable companies continue to enjoy rapid growth in high-speed Internet subscribership and to deploy ever-faster services. For example, in the first quarter of 2009, Comcast had a total of 14.9 million high speed Internet subscribers, and introduced a new wideband Internet service that provides download speeds of up to 50 Mbps;[85] and TimeWarner Cable added 225,000 new residential high speed data subscribers, for a total of 8.7 million.[86]

- The Commission's most recent data show that there were 121.165 million high-speed lines as of December 2007, an increase of 46.3% from year-earlier levels.[87] Further advances surely have been made since December 2007.

These statistics indicate that the market is providing sufficient incentive for carriers to deploy broadband technology and services throughout the United States, without the need for broad new USF subsidies. The Commission can safely refrain from intervening where market forces are sufficient to promote aggressive broadband deployment.

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83 *See Qwest Reports First Quarter 2009 Results*, news release issued April 29, 2009.

84 *See Embarq Reports First Quarter Results Highlighted by Record Cash Flow*, news release issued May 6, 2009.

85 *See Comcast to Roll Out Extreme 50 Mbps High-Speed Internet Service in Bay Area*, news release issued March 3, 2009.

86 *See Time Warner Cable 2009 Reports First-Quarter Earnings*, news release issued April 29, 2009.

87 *See High-Speed Services for Internet Access: Status as of December 31, 2007*, Table 1, report released in January 2009 by Industry Analysis and Technology Division, Wireline Competition Bureau, FCC.

B. Major Reform of the Existing Universal Service Mechanism Is Required Before Expanded Support Can Be Contemplated.

It is unclear whether the Commission has the legal authority to use the existing USF for broadband funding,[88] but even if such funding is permissible, major reform of other aspects of the universal service regulatory regime must be implemented before the Commission can even consider expanding universal service support to broadband services. The legacy USF contribution and distribution mechanisms currently in effect are completely voice-centric and thus inappropriate to support a broadband fund. To ensure the viability and predictability of the federal USF, and to help ensure competitive equity, these legacy voice-centric mechanisms must be drastically overhauled regardless of whether Congress and the Commission authorize additional federal support for broadband services.

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[88] Section 254(c)(1) states that "[u]niversal service is an evolving level of *telecommunications services* that the Commission shall establish periodically under this section..." (emphasis added). Because broadband Internet access service has been deemed by the Commission to be an information service and not a telecommunication service, it would appear to be ineligible under the statute to receive high-cost universal service support. *See Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities; Internet Over Cable Declaratory Ruling; Appropriate Regulatory Treatment for Broadband Access to the Internet Over Cable Facilities*, 17 FCC Rcd 4798, 4801 (para. 4) (2002); *aff'd. National Cable & Telecomms. Ass'n. v. Brand X Internet Services*, 125 S. Ct. 2688 (2005); *Appropriate Framework for Broadband Access to the Internet over Wireline Facilities; Universal Service Obligations of Broadband Providers; Review of Regulatory Requirements for Incumbent LEC Broadband Telecommunications Services; Computer III Further Remand Proceedings; Bell Operating Company Provision of Enhanced Services; 1998 Biennial Regulatory Review – Review of Computer III and ONA Safeguards and Requirements; Conditional Petition of the Verizon Telephone Companies for Forbearance Under 47 U.S.C. 160(c) with Regard to Broadband Services Provided via Fiber to the Premises; Petition of the Verizon Telephone Companies for Declaratory Ruling or, Alternatively, for Interim Waiver with Regard to Broadband Services Provided Via Fiber to the Premises; Consumer Protection in the Broadband Era*, 20 FCC Rcd 14835, 14855 (para. 1) (2005); *United Power Line Council's Petition for Declaratory Ruling Regarding the Classification of Broadband over Power Line Internet Access Service as an Information Service*, 21 FCC Rcd 13281 (2006); *Appropriate Regulatory*

Footnote continued on next page

The USF distribution methodology currently in effect is based on interstate end user revenues for telecommunications services. The contribution factors, which are calculated quarterly, are highly variable because revenues are not always predictable and have been eroding significantly over the past several years, while demand for funds has been increasing. If the Commission were to pile even more funding obligations atop this highly problematic funding mechanism, the contribution factor – which is already well into the double digits (11.3% for the second quarter of 2009) -- is likely to rise to record, unsustainable levels.[89]

Equally serious is the equity aspect of requiring users of basic telecommunications services to support users of broadband services. Broadband access to the Internet is an information service, and not subject to USF contributions. Thus, there would be an obvious mis-match between the range of supported services and the services that comprise the contribution base. It is simply unfair to require one group of entities (telecommunications carriers) and their customers to subsidize the offerings of another group of entities (broadband service providers and their customers) that do not themselves contribute and who are actual or potential competitors to the telecommunications carriers.

Given the problems associated with using telecommunications revenues as the contribution base for any expanded USF, and the importance of broadband to virtually every sector of the U.S. economy, the Commission should recommend that Congress authorize that any broadband USF mechanism be funded from general tax revenues. If there is a clear benefit to the

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Treatment for Broadband Access to the Internet Over Wireless Networks, 22 FCC Rcd 5901 (2007).

89 As the Court of Appeals has said, "excess subsidization...may detract from universal service by causing rates unnecessarily to rise, thereby pricing some consumers out of the market" (*Alenco v. FCC*, 201 F.3d 608, 620 (5th Cir. 2000)).

country as a whole from the expanded availability of broadband services, then the country as a whole should contribute to the development of such services.

In addition to revising the USF contribution mechanism, the Commission must also revise the current distribution mechanism. In the NOI (para. 39), the Commission has appropriately sought comment "on the impact of broadband on our existing universal service programs" and "on what modifications to these programs, if any, should be considered as a part of a national broadband plan." As noted above, the legacy USF distribution system is heavily voice-centric: although incumbent LECs have used USF support to deploy broadband technology throughout their networks,[90] the primary beneficiary of the tens of billions of dollars in high-cost USF distributed to incumbent LECs has been their voice services. However, as evidenced by the release of the instant NOI, the future of telecommunications is broadband – advanced networks that can handle not only voice, but also high-speed video, audio and data. The backwards-looking emphasis on legacy voice networks should be reversed, and support for those legacy networks phased out within a reasonable timeframe, regardless of whether the Commission implements a new broadband support mechanism or not.

VI. BROADBAND SOLUTIONS PROMOTE PUBLIC POLICY GOALS ACROSS THE ECONOMY.

In the NOI (paras. 63-105), the Commission has asked for comment on how broadband infrastructure and services can be used to advance a series of public policy goals. Sprint describes below some of the broadband solutions it offers to meet the needs of customers in the education, public safety, enterprise and health care markets. The applications described below

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[90] As the Commission noted in the NOI (para. 39, footnote omitted), "a carrier providing broadband services indirectly receives the benefits of high-cost universal service support when its network provides both the supported voice services and broadband services."

are but a few examples of how mobile broadband can and does improve the lives of consumers across the nation, enhance business and worker productivity, promote public safety, and foster other public interest goals.

A. Education Applications

Sprint provides mobile broadband solutions to schools across the nation to meet the needs of students, teachers, administrators, and support personnel. These include:

- Wireless Internet access – using routers and LANs, or broadband mobile cards with a personal computer, students, teachers, and staff can access the Internet or school Intranet while at school, on school buses, at distant school sites, or off-campus (*e.g.*, at home or while traveling). This mobile broadband capability enables distance learning, virtual classes, access to a vast array of educational and research material, and the downloading and uploading of school work and administrative information -- 24/7, on- or off-campus. Non-academic staff also benefit from this technology; for example, school maintenance staff can use wireless Internet access from distant locations to connect with a centralized maintenance system to monitor HVAC or other environmental systems for outages and appropriate levels of use.

- School bus tracking using GPS technology - enables schools to identify the precise location, speed and status of each bus. Using this information, school officials can facilitate re-routes necessitated by inclement weather or other emergencies; expedite the deployment of replacement vehicles in the event of a break-down; and review fuel, route and maintenance information for bus management purposes.

- Student attendance tracking using GPS technology – the student swipes his identification card (which would have an electronic identifier such as a bar code or RFID chip) as he enters and exits the school bus or classroom to help teachers and administrators monitor student attendance and location. Accurate student attendance information is vital for both safety and administrative reasons (because the No Child Left Behind law sets target student attendance rates for elementary and middle schools, maintaining accurate student attendance records is critical to demonstrating that a school is making "adequate yearly progress").

- Mobile broadband used with BlackBerry devices - principals, teachers, and administrators are able to access email while they are away from their desks, whenever they wish.

B. Public Safety/Homeland Security Applications

Wireless broadband technology is invaluable in a variety of public safety and homeland security applications. For example:

- Broadband mobile aircards in laptops or handheld devices for first responders and public safety officers – this technology can be used to facilitate records management and incident reporting (for example, police officers can input information directly from their laptops in the squad cars and upload it to the server once they are connected to the network); to access the Internet and department Intranets from a squad car or incident location to check criminal records, warrant files, past call histories, etc.; or to access building blueprints and site maps at the scene of a fire or other disaster.

- Mobile handsets equipped with GPS and appropriate application software – this technology provides public safety, school officials, and other subscribers with live, location-based severe weather alerts.

- Wireless sensors can be installed on the nation's infrastructure facilities such as bridges to monitor structural integrity and to test for corrosion, wear and tear, or other damage. Tests can be performed, and data can be transmitted, over mobile broadband facilities.

- Wireless broadband technology can provide high-speed, live streaming audio and video surveillance of natural disaster, accident, or crime scenes.

C. Entrepreneurial and Enterprise Applications

Companies large and small are able to deploy mobile, more nimble and responsive workforces in large part because of broadband technologies. Employees in the field can submit and track customer orders, check inventory, view customer records, etc. with almost instantaneous results using mobile broadband applications. Improved real-time access to information results in improved productivity and efficiency.

Broadband technology has also helped to make teleworking feasible for millions of workers. The potential benefits of teleworking are significant: reduced traffic congestion and pollution; reduced non-productive commuting time; reducing employers' need for and thus expenses associated with physical office space and other overhead; offering employees more flexibility and improved work/life balance. In addition, teleworking can help ensure operational

continuity by reducing the impact of catastrophes such as mass casualty natural disasters, terrorist attacks, or pandemics of infectious diseases – or even relatively minor inconveniences such as bad weather.

D. Health Care Applications

Health care professionals are turning more and more to mobile broadband services to improve the quality of patient care, streamline billing and insurance documentation, and enhance medical research. For example:

- Mobile broadband cards with a personal computer, "smartphones" and PDAs – physicians and other health care professionals can view clinical results, examine radiology images, capture billing codes and access other billing and insurance information, and transmit electronic prescriptions directly to pharmacies using their laptop, smartphone, PDA, or other hand-held device. Data can be transmitted to or retrieved from back-office systems, directly and securely, while the health care provider is out of the office or hospital.

- GPS solutions – field workers such as home health nurses can receive audio and visual navigational information. Personnel and vehicles also can be monitored to maximize resource deployment, minimize travel time and expenses, and accurately record employee location.

E. Consumer Welfare Activities

In addition to the applications described above, mobile broadband services can improve the lives of consumers in innumerable other ways: by enabling speedy and secure on-line shopping, banking and other financial transactions; permitting rapid downloads and uploads of text (including entire books),[91] data, audio, and video files; and facilitating telecommuting by making it easier to exchange and access work-related information from locations other than the

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[91] When paired with a wireless reading device such as a Kindle, Sprint's wireless broadband service enables users to buy and receive a book, a newspaper or magazine, or other written material, in seconds.

employee's office desk, and to participate in videoconferences (and, as noted above, telecommuting generates the additional benefits of reducing wasted commuting time, traffic congestion and pollution, and improving employees' work/life balance).

VII. CONCLUSION

Broadband technology is one of the primary engines driving the US economy and one that will help spur economic recovery. Broadband services offer the promise of improved health care and education; more productive and flexible workplaces; enhanced public safety and homeland security; and the ability to share information, perform financial transactions, shop, and communicate with others at speeds and at a level of security that were undreamed of only a few years ago. Sprint applauds and supports the Commission's efforts to ensure that access to affordable broadband services is available throughout the nation, and believes that this goal can best be achieved through implementation of policies that promote sustainable, facilities-based competition.

One of the best means of fostering competition in the broadband services market is to ensure that one of the critical inputs to those services – special access or middle mile backhaul facilities – are available to broadband service providers at reasonable rates, terms and conditions. In light of the overwhelming record evidence that incumbent LECs such as AT&T and Verizon exercise monopoly control over these backhaul facilities in their respective territories, the Commission should act expeditiously to address this market failure.

Sprint believes that long-overdue reform of special access regulations, combined with the billions of dollars of private investment triggered by market forces, will help ensure access to broadband services throughout most of the country. Any remaining unserved or underserved areas identified by the Commission or other federal agencies may require some additional

support. However, the existing universal service fund should not be the source of such support. The legacy voice-centric USF is broken, cannot support new broadband obligations, and should no longer serve as a mechanism for transferring wealth from one sector of the communications industry to another. Given the importance of broadband to the national economy, and the range of entities providing broadband services, any broadband support should instead come from general tax revenues.

Respectfully submitted,

SPRINT NEXTEL CORPORATION

/s/ Charles W. McKee

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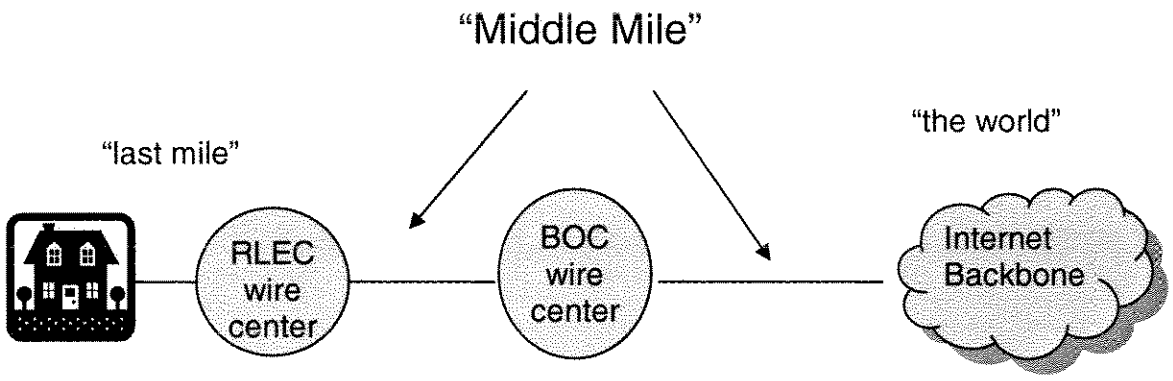
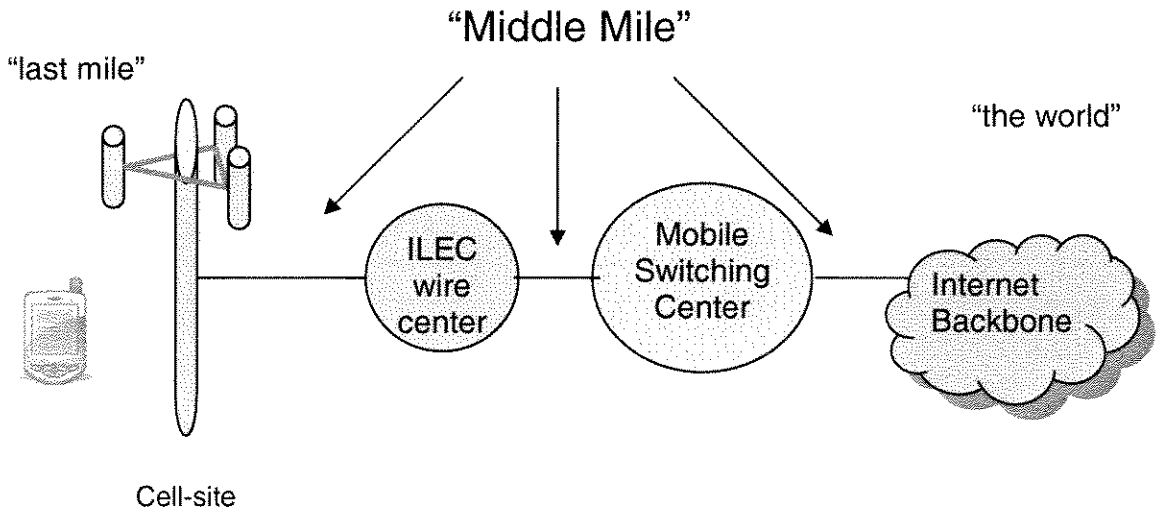
June 8, 2009

ATTACHMENT 1

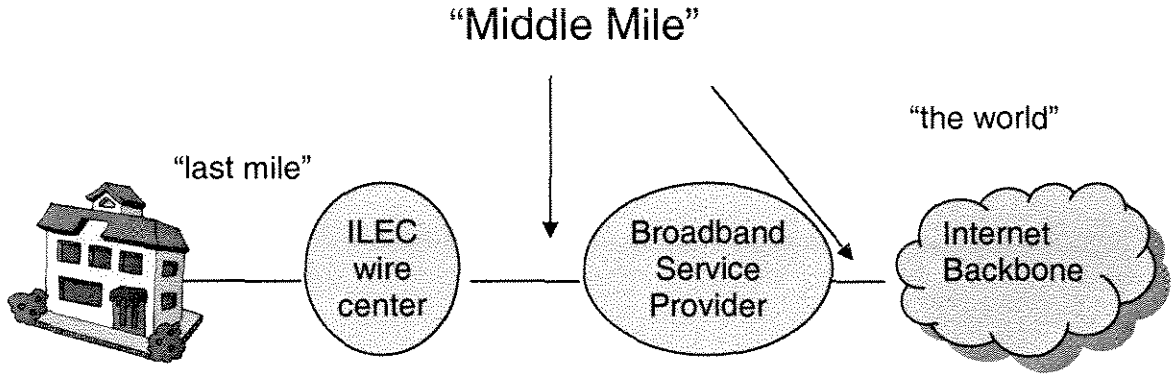
Scenario 1
Fixed Rural Broadband



Scenario 2
Mobile Broadband



Scenario 3
Fixed Office Broadband



ATTACHMENT 2

LEC Migration Charges

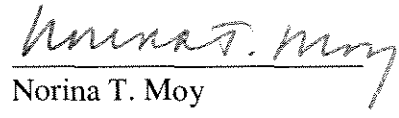
Vendor	States	Services	Tariff Ref	Migration Charge	Quantity per Night	Nights per Week
AT&T - Ameritech	MI, WI, IN, IL & OH	DS1	FCC No. 2, 7.4.2(c)(6), 7.5.15 and 13.2.6	One time charge of $500 **plus** hourly overtime labor rates - $36.06 first half hour, $26.62 additional half hour	10	5
AT&T - BellSouth	KY, TN, MS, LA, GA, AL, FL, NC & SC	DS1	FCC No. 1, 7.4.5 (A) & (B), 7.5.9 (A), 7.5.9 (B) and 5.1.1 (G)	One time charge of either $563 or $1125	10 per state	4
AT&T - Pacific Bell	CA	DS1	FCC No. 1, 7.5.9 (E), 7.5.9 (I)(5), 7.4.18 (F) and 13.2.6 (A)	One time charge of either $427 or $900* **plus** hourly overtime labor rates - $45 first half hour, $24 each additional half hour	10	5
AT&T - Nevada Bell	NV	DS1	FCC No. 1, 7.11.5.2 (C), 7.11.5.3 (F)(5), 5.2.5 (D), 7.2.3 and 13.2.6 (A)	One time charge of either $450 or $900* plus overly overtime labor rates - $60.32 per each half hour	10	5
AT&T - SNET	CT	DS1	FCC No. 39, 2.10.3 (A)(2) and 8.6.2 (D)	One time charge of $122 plus hourly overtime labor rates - $55.99 first half hour, $25 each additional half hour	10	5
AT&T - Southwestern Bell	AR, KS, MO, TX & OK	DS1	FCC No. 73, 7.4 (A), 7.3.10 (F), 7.2.22 (C) and 13.4.2 (A	One time charge of $125, $150 or $900* **plus** hourly overtime labor rates - $250 first half hour, $100 each additional half hour	10	5

LEC Migration Charges

Vendor	States	Services	Tariff Ref	Migration Charge	Quantity per Night	Nights per Week
VZ - South, FCC #1	PA, NJ, MD, DE, DC, VA, WV	Special & Switched DS1, DS3	FCC No 1, 7.4.1. (C), 7.4.5 (B), 7.5.9.1 (a), 13.2.5 and 13.2.6 (C)	One time chg of $380 for coordinated retermination and one time chg of $200 for other labor	5 Per CATC (5 CATCs in VZ footprint)	4
VZ - GTE, FCC #14 and GTECO, FCC # 16	CA, IN, MI, FL, IL, OH, PA, WI, ID, OR, WA, NC, SC, VA, TX, AZ, NV	Special & Switched DS1, DS3	FCC No 14, 5.6.4 and FCC No 16, 7.21 (D) (4)	One time chg of $450	5 Per CATC (5 CATCs in VZ footprint)	4

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing Comments of Sprint Nextel Corp. was filed electronically or via US Mail on this 8th day of June, 2009 to the parties listed below.



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